

Notice of Allowability

Application No.

10/606,204

Applicant(s)

CONGER, STEVEN

Examiner

Anthony Fick

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's amendment of 6/5/07.
2. ☒ The allowed claim(s) is/are 1-5, 7-13, 15, 16 and 18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Remarks

1. Applicant's after final amendment has placed the claims in condition for allowance and is therefore entered. The reasons for allowance are given below.

Allowable Subject Matter

2. Claims 1 through 5, 7 through 13, 15, 16 and 18 are allowed.
3. The following is an examiner's statement of reasons for allowance: independent claims 1, 9 and 16 all require a specific configuration for panel receivers including curved struts and horizontal struts in addition to the cable support systems. The closest prior art is Dorison et al. (U.S. 5,478,407) and Stein (EP 0373234).

Dorison discloses an apparatus and method of shading surfaces with photovoltaic elements on the shading material. Figure 5 shows the shading material with the solar cells supported. The points in figure 5, 12, 13 and 14, correspond to supports or columns. Points 12 are high column points, and points 14 are low column points (column 5, paragraph 5). Thus the figure shows two pairs of columns, a first cable suspended between the first columns, cable between columns 12 and 12, a second cable suspended between the second columns, cable that runs from column 14 to column 14 through column 13, and a plurality of panel receivers each adapted for receiving a number of solar panels, cable netting nodes 16, the nodes being secured to each of the two cables by the cross cables in the netting and the nodes each receiving a number of panels, either multiple modules 20d, or each module 20'd contains multiple solar panels.

Stein discloses a solar panel array structure. Figures 5 and 6 show a system for supporting an array comprising two pairs of columns, a first cable suspended between the first columns, a second cable suspended between the second columns, a plurality of receivers each receiving a number of solar panels and secured to each of the cables.

The panel receivers of Dorison are just junction points of the netting and the receivers of Stein are simply flat panels. While the configuration in the claims is similar to prior art structures for satellites, ground based or roof based solar cell panels, it would not be obvious to utilize these sturdy and heavy structures within systems like Dorison or Stein. The cable systems benefit from solar panels or receivers that are more flexible and lightweight to reduce the structural requirements of the cables or the towers. Therefore the use of such structured receivers as in the present invention with cable systems is not obvious over the prior art. The remaining claims all depend from the independent claims and are allowable for the same reasoning.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Fick whose telephone number is (571) 272-6393. The examiner can normally be reached on Monday - Friday 7 AM to 4 PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Fick
AU 1753
June 13, 2007

ADF


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700